Breaking the habit: a retrospective analysis of desistance factors among formerly problematic heroin users

DAVID W. BEST, SAFEENA GHUFRAH, ED DAY, RAJASHREE RAY, & JESSICA LOARING

Department of Psychiatry, University of Birmingham, Birmingham, UK

Abstract

Introduction and Aims. The aim of this study was to examine heroin careers among former users to assess desistance factors and explanations for sustained abstinence. Design and Methods. The study surveyed 107 former problematic heroin users who have achieved long-term abstinence about their experiences of achieving and sustaining abstinence. The cohort was recruited opportunistically from three sources, drawing heavily on former users working in the addictions field. Results. On average, the group had heroin careers lasting for just under 10 years, punctuated by an average of 2.6 treatment episodes and 3.1 periods of abstinence, and had been heroin abstinent for an average of 10 years at the time of completing the survey. The most commonly explained reason for finally achieving abstinence was 'tired of the lifestyle' followed by reasons relating to psychological health. In contrast, when asked to explain how abstinence was sustained, clients quoted both social network factors (moving away from drug-using friends and support from non-using friends) and practical factors (accommodation and employment) as well as religious or spiritual factors. Treatment was not mentioned widely either in achieving or sustaining abstinence, in contrast to 12-Step, which was endorsed widely. Discussion and Conclusions. The study supports a career perspective for examining heroin careers and indicates that, while achieving abstinence is possible for chronic opiate users, the path to sustained abstinence is complex and often reliant upon external support systems. [Best DW, Ghufra S, Day E, Ray R, Loaring J. Breaking the habit: a retrospective analysis of desistance factors among formerly problematic heroin users. Drug Alcohol Rev 2008;27:619-624]

Key words: desistance factors, heroin careers, maturing out, natural recovery, professionals in recovery.

Introduction

Opiate addiction has been characterised as a 'chronic, relapsing condition' akin to diabetes, where the aim of treatment should be around symptom management and with the assumption that complete recovery is not a realistic treatment objective [1]. However, treatment outcome research does not suggest such a bleak prognosis. In the Drug Abuse Reporting Program (DARP), an outcome study of US treatment programmes involving an initial recruitment of 44,000 drug users, the reported average length of the addictions career was 9.9 years. However, there was considerable variation in length of addiction careers reported, with 4% of the sample reporting careers of more than 20 years and 28% reporting careers of between 1 and 5 years [2]. Although no equivalent long-term outcome data were available from the UK National Treatment Outcome Research Study (NTORS), 48% of the residential intake sample had achieved abstinence from all opiates 2 years after study entry, with high levels of continuity of abstinence achieved within this group, and the smaller group of community clients who had achieved abstinence [3]. Thus, long-term abstinence has been shown to be a realistic goal for at least a proportion of dependent drug users recruited from treatment services.

The debate on the retractability of addiction has been ongoing for many years, typified by Winick's [4] assertion that users 'mature out' of drug addiction, and that addiction can be conceptualised as a self-limiting phenomenon, where it is possible for addicts to recover on their own. This position was supported by a study conducted by Schurze [5] in which he interviewed 40 ex-users and found that nine had experienced physical

David W. Best BA, MSc, PhD, Senior Lecturer in Addictions, Department of Psychiatry, University of Birmingham, Birmingham, UK. Safeena Ghufra BSc, Assistant Psychologist, Department of Psychiatry, University of Birmingham, Birmingham, UK. Ed Day BA, MA, BM, BCh, MRC Psych, Senior Lecturer in Addictions Psychiatry, Department of Psychiatry, University of Birmingham, Birmingham, UK. Rajashree Ray MRC Psych, Senior Registrar, Department of Psychiatry, University of Birmingham, Birmingham, UK. Jessica Loaring BSc, MSc, Research Officer, Department of Psychiatry, University of Birmingham, Birmingham, UK. Correspondence to Dr David Best, Department of Psychiatry, Queen Elizabeth Psychiatric Hospital, Mündelshof Way, Birmingham B13 2QZ, UK. E-mail: D.W.Best@bham.ac.uk

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dependence on heroin, yet had recovered without going into formal treatment. This has prompted considerable discussion about the phenomenon of 'natural recovery'. Granfield & Cloud [6] studied a group of problem users who had achieved recovery without recourse to formal addiction treatment services, and reported that the rejection of an 'addict' identity and changing the peer group to non-using friends were key elements in recovery. Similarly, McIntosh & McKeganey [7] have argued that maturing out is often a consequence of a physical maturational process combined with reduced hedonic pleasure from substance use altering the reward pay-off related to drug consumption.

Biernacki [8] has argued that there are three categories of quitting. In the first category the person stops using the addictive drug but does not make a firm decision to do so, but that only 4–5% of users fall into this category. In the second category, ideas of quitting are developed rationally and stated explicitly; approximately two-thirds of the sample falls into this category. For the third category, comprising people who have hit rock bottom or have experienced an existential crisis, the decision to stop emerges from a highly dramatic, emotionally loaded life situation; around a quarter to a third fit into this category.

The suggestion that there are stages through which addicts go before stopping, mediated by intensity and career factors, may help to explain the variability in addiction careers. Further evidence that recovery is possible under particular conditions comes from White & Kurtz [9], who argued that recovery is mediated by factors such as the intensity of drug problems, the motivation of the users and the extent of support (such as family and non-using friends) the individual has during their recovery journey [9].

Similarly, there may be environmental prompts to desistance from addiction careers. In a study of returning Vietnam veterans, Robin [10] interviewed 898 veterans, of whom nearly one in two had used narcotics in Vietnam (45%) and one in five (20%) had been addicted to heroin. After returning, only 10% reported using narcotics between the time of their return and the interview and only 1% had been re-addicted. The study also found that veterans who did not go into treatment for their addictions did just as well as those who were treated.

Aims of the study

The study attempted to access a group of individuals who had used heroin in a problematic way but who had subsequently completed their heroin careers, to assess the heroin career dynamics of this group, and to measure 'desistance factors'. By assessing individuals' experience of quit attempts and the factors surrounding the final cessation attempt the aim was to identify what enables problem heroin users both to achieve abstinence and then to sustain it. The recruitment strategy for the study was to attempt to access individuals known to have completed their heroin careers to allow retrospective assessment from a period when they are unlikely to have been at risk of relapse—in other words, when their abstinence had been sustained for a number of years, enabling reflection on 'completed' heroin careers.

Method

An opportunistic sample from three different sources was used. The first pilot was carried out at the UK and European Symposium of Addictive Disorders (UKB-SAD), where 20 male and four female participants were recruited successfully. The second pilot was carried out in Castle Craig residential rehabilitation hospital, where a further five male participants were recruited. Therefore, a total of 29 former heroin users were recruited at the two pilot sites (or 27.1% of the total sample reported here). The questionnaire was a brief self-completion instrument of four pages, consisting primarily of quantitative questions about heroin careers and desistance, but containing open-ended questions assessing how people became drug-free and how they managed to remain that way. Participants had the option of confidentiality, but were also given the opportunity to provide contact details for a possible follow-up in-depth interview. On completion of the questionnaire, participants at the two meetings had the option of returning the questionnaires directly to the researcher or posting it in a self-addressed envelope. For the postal survey, no return envelopes were provided and participants had to return the forms directly to the research centre.

The method was evolutionary, in that the distribution of the instrument at these two initial events was opportunistic and allowed preliminary testing of the acceptability of the instrument prior to the printing of the questionnaire for inclusion in the magazine Addiction Today, sent out to drug and alcohol agencies bimonthly. This yielded a total of 78 completed questionnaires (from 60 male former heroin users and 18 female former heroin users). There were no differences between the recruitment sites in terms of the gender or ethnicity profile, but former heroin users recruited from the postal survey were significantly younger (mean age= 39.7 years) than those recruited from either the conference (mean age= 48.6 years) or the reunion event (mean age= 46.0 years; F(2,102) = 10.21, p < 0.001).

Results

Heroin careers

A total of 107 individuals reported lifetime use of heroin, with a mean age of 42.1 at the time of interview;
79.4% of this group were male, and 88.5% of the group were white. The majority of those recruited were working in the addictions field at the time of the survey (n=85, 79%). The most common occupations of this group were drug workers or service managers, and they had been working in the addictions field for an average of 6.9 years.

In terms of their substance use careers, the majority of the group had started drinking at the age of 11.5 years (n=68), and had first used heroin at the age of 20.5 years (although this ranged from 7 to 40 years). Ninety-one individuals (85.8%) had ever progressed to daily use, first doing so at a mean age of 21.6 years, and 83 (78.3%) had started injecting at the age of 22.6 years. The group reported a peak age of heroin use at 26.2 years (range 17-43 years), and an age of last use averaged 32.4 years (Figure 1).

The average length of the heroin career reported was 10.2 years (range of less than 1 year up to 28 years). During the course of this career, the participants reported a mean of 2.6 periods of abstinence (ranging from 0 to 18), and an average of 3.1 episodes of treatment (range 0-20). At the time of interview, they had been abstinent for an average of 9.1 years (range 0-34 years). 60.9% reported that they had been abstinent from heroin for at least 5 years, and 97.3% for more than 1 year. The cohort averaged 4.8 previous quit attempts and only 15.2% of the sample achieved long-term abstinence on their first quit attempt.

Factors related to heroin careers

Age of heroin initiation was correlated strongly with age of first daily use (r=0.83, p<0.001) and to age of first injecting (r=0.80, p<0.001), and this is indicative of broadly consistent career pathways across the sample. Additionally, earlier onset of heroin use was associated with longer careers (r=0.7 0.27, p<0.05) and to more periods of heroin treatment during the career (r=0.7 0.24, p<0.05). There was also a strong positive association between how long heroin users had been abstinent for and how long they had worked in the addictions field (r=0.66, p<0.001).

There were no gender differences in age of onset for heroin, nor in typical length of heroin careers or periods of abstinence during the career, but female heroin users reported a higher mean number of episodes of treatment during their heroin careers than men (mean 4.2 compared to 2.6; t=2.15, p<0.05).

Those who had ever injected heroin (n=83) were younger at age of first heroin use, although this difference was not statistically significant (mean 19.9 versus 22.6 years; t=1.73, p=0.09) and they had a significantly longer average heroin-using career (mean 10.8 versus 7.3 years; t=2.03, p=0.05). There were no differences in how long the groups had been abstinent or in how long they had been working in the addictions field by injecting history.

The alcohol and cocaine careers of heroin users

It is important to note that the heroin users in our sample are described more accurately as polysubstance users, as shown in Table 1, with around two-thirds (64.2%) reporting lifetime drinking and 29% daily drinking at some point in their lives.

While only approximately two-thirds of lifetime heroin users ever reported drinking, nearly 90% reported lifetime cocaine use and more than half had used cocaine on a daily basis at some point. Heroin users who were daily users of both alcohol and cocaine at some point (n=13) had significantly longer heroin-using careers (mean 14.8 years) than those who had been either daily users of only one of those substances (mean 9.5 years) or neither alcohol nor cocaine (mean 9.4 years; F=4.11, p<0.05).

Cessation factors

Participants were asked about the period immediately prior to their final (and successful) quit attempt and
Table 1. Patterns of cocaine and alcohol use among heroin users

<table>
<thead>
<tr>
<th></th>
<th>Alcohol (number ever)</th>
<th>Alcohol (mean age)</th>
<th>Cocaine (number ever)</th>
<th>Cocaine (mean age, years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of first use</td>
<td>n=68</td>
<td>11.5 years</td>
<td>n=91</td>
<td>20.7</td>
</tr>
<tr>
<td>Age of first daily use</td>
<td>n=31</td>
<td>29.5 years</td>
<td>n=55</td>
<td>23.8</td>
</tr>
<tr>
<td>Age of last use</td>
<td>n=42</td>
<td>35.7 years</td>
<td>n=68</td>
<td>32.8</td>
</tr>
<tr>
<td>Number of years active use</td>
<td>n=37</td>
<td>19.1 years</td>
<td>n=58</td>
<td>10.3</td>
</tr>
<tr>
<td>Number of periods of alcohol treatment</td>
<td>n=41</td>
<td>2.8 episodes</td>
<td>n=49</td>
<td>2.3 episodes</td>
</tr>
</tbody>
</table>

about their motives for stopping. The heroin users in the sample were engaged heavily in heroin use in the period prior to achieving abstinence—overall, the group reported using heroin on a mean of 69.7 days in the last 3 months (70.9% reported using on a daily basis), using a mean of 1.0 g per day. Additionally, 38 individuals were prescribed methadone, 47 (44.3) reported crack cocaine use (of whom 16 used crack on a daily basis) and 63 reported alcohol consumption in the 3 months before heroin abstinence (including 47 individuals drinking on a daily basis, 44.3% of all the heroin users).

Participants were asked about their reasons for deciding to stop using heroin, with a checklist of options provided as shown in Table 2.

Thus, the most commonly given reason for stopping was being 'tired of the lifestyle', with more than half also reporting some psychological problems as motivating their desistance attempt. The survey also probed the period immediately after the final quit attempt, examining both factors that enabled continued abstinence and any substance substitution. In the 3 months after stopping heroin use for the last time, seven individuals (6.6%) reported prescribed methadone use (of whom three reported daily prescriptions), and six reported crack cocaine use (none on a daily basis). Nineteen reported alcohol consumption, of whom four were drinking on a daily basis. Similarly, six reported use of other drugs in this period—two using dihydrocodeine, two using buprenorphine, one benzodiazepines and one ecstasy. However, the majority (n=69, 64.5%) were abstinent from all substances in the period after stopping heroin.

Reasons for maintaining abstinence

Participants were then asked to complete a version of Table 2 to describe the factors that enabled them to sustain their abstinence; these are shown in Table 3.

It is clear that partners were perceived to play a much smaller role in maintenance of abstinence than friends, but that the friends are those not involved in substance use. It is clear from the data above that moving away from substance-using friends is seen as critical, as is peer support, underpinned by stable accommodation and, in many cases, religious or spiritual beliefs.

What enabled the participant to remain abstinent on this occasion?

On average, the former heroin users reported 5.4 previous quit attempts, ranging from no attempts to 50 (data available for 68 participants). There were no significant associations between any of the mapped
Aspects of the heroin career or previous treatment attempts and the number of previously unsuccessful quit attempts. There were no differences in number of previous attempts at quitting by injecting status or by gender. An open-ended question asked participants why they felt that previous attempts had not been successful, with the main responses categorised into themes as reported in Table 4 below. A total of 79 individuals provided a total of 87 reasons.

Thus, the most common reasons given were lack of adequate support, not being ready for abstinence and a lack of awareness about the problem. This is typified in the comment that previous failures were a result of "a combination of not wanting to stop, crap drug workers and mostly trying to stop using in the area I had used in" (client no. 2). This general perception of inadequate support from structured treatment services was also reflected in the report that "I would go onto methadone and be prescribed 30 mg which was never enough. In addition, I always had other problems like homelessness, lack of support, and these issues were never addressed" (client no. 44).

This was followed by an open-ended question asking 'what was different on this occasion?', which yielded a total of 93 comments, categorised by a thematic analysis into a total of eight themes as shown in Table 5.

<table>
<thead>
<tr>
<th>Reason</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of support</td>
<td>30</td>
</tr>
<tr>
<td>Not 'ready' for abstinence</td>
<td>27</td>
</tr>
<tr>
<td>Lack of awareness or insight about nature of addiction</td>
<td>16</td>
</tr>
<tr>
<td>Remaining around other users</td>
<td>8</td>
</tr>
<tr>
<td>Lack of adequate aftercare supports</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
</tr>
</tbody>
</table>

These comments reflect the responses to the closed questions in which social support systems consisting of non-using friends and engagement with 12-Step organisations were central to the successful quit attempt. This appears to have combined with changes in either psychological or environmental factors, enabling change to be maintained. This combination of factors is illustrated in the assertion that maintaining abstinence resulted from 'the learning experience of rehab, the support of friends, changed environment, a treatment order from court [and] had enough of drugs and the lifestyle' (client no. 83). Similarly, another client reported treatment as a catalyst for a change process in the assertion that maintained abstinence resulted from 'in-patient, support and encouragement of staff and peers; complete change of lifestyle when I came out of detox; also moved back in with parents. I attended an abstinence programme for 13 weeks—it got easier' (client no. 51). In this way, a combination of lifestyle factors combined with the right kinds of support were seen as critical to sustained recovery.

### Discussion

The study used an opportunistic recruitment method to assess desistance factors in a group of heroin users who had achieved and sustained abstinence, typically after heroin careers averaging 10 years. However, for less than one in six it was their first attempt at achieving abstinence successful in the long term, with the population characterised by an average of nearly five previous attempts at stopping using. This finding is consistent with participants' reports, that what enabled them to achieve a heroin-free state and what enabled maintenance of a drug-free state were often different things. The motive reported most commonly for achieving abstinence was around the 'maturing out' phenomenon, reported here as 'tired of the lifestyle', as suggested both by Winick [4] and McIntosh & McKeganey [7]. However, the factors associated with maintaining this abstinence were linked more often to social networks, including moving away from heroin-using friends and relying on support from non-using friends.

There was little indication of the role of formal treatment in the recovery process, in spite of clients averaging between two and three episodes of previous drug treatment. While it is possible that treatment may offer some kind of cumulative benefit that prepares clients for long-term abstinence [11], the current sample provided little indication that it was a direct catalyst for change in their descriptions of the key factors that allowed them to become drug-free. For both achieving, and especially for maintaining, abstinence spiritual factors and 'sober' support networks, associated with the 12 Steps, were mentioned much more frequently.
The findings suggest clearly the importance of developing appropriate support systems for drug users who achieve abstinence, akin to the recovery communities assessed by White & Kurtz [9]. The paucity of evidence about effective 'aftercare' is indicative of a treatment system that is biased heavily towards the 'front end' of engagement and early retention, with little resource in the United Kingdom, or resultant research, assessing what works for those who achieve a drug-free status. Not only is this crucial for sustaining treatment gains, it is also essential for a drug treatment system where abstinence is regarded as a meaningful goal. There is also little in the way of monitoring of the abstinence population who have passed through formal treatment and, in England, there appears to be too great a reliance on local self-help groups to support ongoing abstinence.

However, it is important to acknowledge the limitations of the current study both in terms of the sample recruitment and the measures for recording past events. This sample, consisting largely of professionals in the addictions field, was obtained opportunistically, and there is no evidence to support claims for generalisability. This is particularly true regarding the 'representativeness' of the sample. While there was no actual recruitment through Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), many of the participating organisations were supportive of the 12 Steps, and it remains unknown whether equivalent populations could be accessed outside this tradition and, if this were possible, whether their views would be similar. There was little indication of use of other structured support systems in the community and further work will attempt to assess more closely the informal networks that have been used. Similarly, for a substantial proportion of the cohort, the events of achieving abstinence occurred long periods prior to the completion of the brief questionnaire and so may be susceptible to recall and self-serving biases. Similarly, the data-collecting instrument was not validated and was a brief summary measure and we have no data to report on its psychometric performance. The instrument did not contain a quantitative measure of structured treatment engagement in the final desistance journey, and we are reliant upon qualitative reporting in response to the question: 'in your view, what were the key things that finally helped you become completely abstinent?'. Therefore, future research that we conduct in this area will attempt to address this omission.

None the less, it is intrinsic to studies of long-term abstinent groups that recruitment is intrinsically problematic, and that there may be all kinds of reasons why those who have achieved abstinence and moved on in their lives may be unwilling to label themselves as former heroin addicts or to discuss their experiences. Thus, workers in the field who are open about their previous experiences constitute a research resource that has not been tapped adequately. This group offers a potential balance against exclusive research focus upon those engaged and maintained in drug treatments for whom abstinence may appear an unrealistic goal. In this context, the high levels of heroin use reported in the pre-abstinence period provide considerable grounds for optimism and suggest that the careers approach implicit in much of the natural recovery writing may offer a more positive and promising perspective not only for addiction researchers but also for drug-users, their families and for the workers in treatment services who are all too readily confronted with signs of failure.

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**References**
